CPTO DRS 12/27/04

--1.   (Amended)   An image processing apparatus including plural image processing

means, by which plural kinds of image processing are executed in parallel, comprising:

data transfer means, each of which produces address information for use in

storing, in storage means, plural image data sequentially input from image input means, and

sequentially transfers and stores the image data to and in the storage means based on the

produced address information; and

informing means which informs each of the plural image processing means of the

address information of the storage means in which image data to be read is stored upon request

of the image data to be read by each of the plural image processing means,

wherein said image processing means reads each of the image data to be read

based on the informed address information so as to process the image data.--

2.   The image processing apparatus as set forth in Claim 1,

characterized by further comprising transfer controlling means

which sequentially transfers and stores the image data input from

the image input means to and in a storage region other than a

storage region storing therein the image data to be read out of

storage regions forming the storage means until the image data to

be read is read by the image processing means.

--3. (Amended) A robot apparatus including plural image processing means, by which plural kinds of image processing are executed in parallel, comprising:

data transfer means, each of which produces address information for use in storing, in storage means, plural image data sequentially input from image input means, and

sequentially transfers and stores the image data to and in the storage means based on the produced address information; and

informing means which informs each of the plural image processing means of the address information of the storage means in which image data to be read is stored upon request of the image data to be read by each of the plural image processing means,

wherein said image processing means reads each of the image data to be read based on the informed address information so as to process the image data.--

4. The robot apparatus as set forth in Claim 3, characterized by further comprising transfer controlling means which sequentially transfers and stores the image data input from the image input means to and in a storage region other than a storage region storing therein the image data to be read out of storage regions forming the storage means until the image data to be read is read by the image processing means.

--5. (Amended) An image processing method in which plural image processing means execute plural kinds of image processing in parallel, comprising the steps of:

producing address information for use in storing, in storage means, plural image data sequentially input from image input means, so as to sequentially transfer and store the image data to and in the storage means based on the produced address information; and

informing each of the plural image processing means of the address information of the storage means in which image data to be read is stored upon request of the image data to be read by each of the plural image processing means,

wherein the stored image data is read based on the informed address information so as to process the image data.--

6.   The image processing method as set forth in Claim 5, characterized by further comprising the step of sequentially transferring and storing the image data input from the image input means to and in a storage region other than a storage region storing therein the image data to be read out of storage regions forming the storage means until the image data to be read is read by the image processing means.

--7.   (New)   An image processing apparatus operated by object-oriented programming, comprising:

image input means;

plural image processing objects;

storage means accessible from said plural image processing objects;

data transfer means for producing address information used to store in said storage means a plurality of image data sequentially inputted from said image input means, and for sequentially transferring said plurality of mage data to said storage means based on the produced address information;

means responsive to a request from each said image processing object to read out image data from said storage means, to provide to the requesting image processing object the address at which the image data is stored, whereby said requesting mage processing object reads out the image data, based on the provided address information so as to process the read out image data.--